

Remarks

Claims 21 and 22 stand rejected under 35 U.S.C. § 112, second paragraph. Claims 1-3 and 6-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,547,774 to Gould (hereafter “the Gould patent”). Claims 4-5, 9-15, and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gould patent. Claims 16-18 and 20-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gould patent in view of U.S. Patent No. 4,135,587 to Diaz (hereafter “the Diaz patent”).

Additionally, the drawings have been objected to as containing informalities.

I. The Drawing Objections have been Accommodated

The drawings stand objected to under 37 C.F.R. § 1.84(p)(5) because they did not include appropriate reference numbers mentioned in the specification. Applicants respectfully submit that specification has been amended to remove reference to the missing reference numbers. Therefore, Applicants respectfully request that this objection be withdrawn.

The drawings also stand objected to under 37 C.F.R. § 1.84(p)(4) because the reference number “100” has been used to designate both a bonding agent and the epoxy seal. Applicants respectfully traverse this objection. Particularly, the specification states that “[t]he epoxy (which may also be UV-curable) or other pressure-resistant bonding agent 100...”. (Specification at 5-6). Thus, it is clear that the bonding agent 100 may in fact be the same as the epoxy seal 100. Because the epoxy seal 100 is an example of a bonding agent 100, Applicants believe that the use of a common reference number is appropriate in this situation and therefore respectfully request that the Examiner withdraw the objection under section 1.84(p)(4).

II. Claims 21 and 22 are Definite

Claims 21 and 22 stand rejected under 35 U.S.C. § 112, second paragraph.

In accordance with the Examiner's helpful comments, Applicants have amended claims 21 and 22 as appropriate to correct the typographical errors existing in the dependency of those claims. Applicants therefore believe that this rejection has been overcome and respectfully request that the Examiner withdraw the rejection as these claims are in condition for allowance.

III. Claims 1-15 and 19 are Patentable over The Gould Patent

Claims 1-3 and 6-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by the Gould patent. Claims 4-5, 9-15 and 19 stand rejected under 35 U.S.C. § 103(a) as being obvious over the Gould patent.

Claim 1 recites "a metal-plated optical fiber" and "a bonding agent disposed on the metal-plated optical fiber". Claim 9 recites "applying a bonding agent to at least a portion of the metal after the metal has been plated on to the exposed surface". Claim 19 recites "an epoxy seal bonded to the metal plating of at least some of the optical fibers in the second region and extending partly into the first region and partly into the second region".

The Gould patent is directed to an "optical communication system for drill hole logging" including "an armored cable". *See* Abstract. This armored cable may include a jacket layer (53). This jacket layer (53) may be made of a "metal tube" such as a "welded nickel-steel alloy tube". *See* Gould patent, col. 3, ll. 61-66. This jacket (53, 54) may be "surrounded by an annular ring of conductors, 55" and "spacers 56".

The Gould patent fails to disclose or suggest any type of a metal plating process. Rather, the Gould patent may suggest the use of metal tubing, which is fundamentally different than plating a fiber with metal. Moreover, the Gould patent fails to disclose "a bonding agent disposed on the metal-plated optical fiber", as recited in claim 1; a method including "applying a bonding agent to at least a portion of the metal after the metal has been plated on to the exposed surface"; and "an epoxy seal bonded to the metal plating of at least some of the optical fibers in the second region and extending partly into the first region and partly into the second region", as recited in claim 19. There is no indication that the "fluorinated compound" that may be used as the second layer (54) is intended to bond anything as it is preferably made of Teflon, which is

notorious for its non-bonding properties. *See* col. 3, ll. 59-61.

Because the Gould patent fails to disclose or suggest these elements of claims 1, 9 and 19, Applicants respectfully request that the Examiner 2-8, 10-15 and 23 and 24 depend from claims 1 or 9, and these claims are allowable for at least this reason.

IV. Claims 16-18 and 20-22 are Patentable over the Gould Patent in view of the Diaz Patent

Claims 16-18 and 20-22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Gould Patent in view of the Diaz Patent.

As set forth above claim 9 recites “applying a bonding agent to at least a portion of the metal after the metal has been plated on to the exposed surface”. Claim 19 recites “an epoxy seal bonded to the metal plating of at least some of the optical fibers in the second region and extending partly into the first region and partly into the second region”.

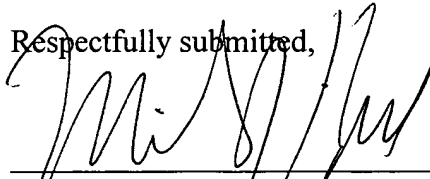
As discussed in detail above, the Gould patent fails to disclose or suggest these features recited in claims 9 and 19. Likewise, the Diaz patent fails to disclose or suggest any of these features. Claims 16-18 and 20-22 are dependent on claims 9 and 19, respectively, and therefore are allowable for at least this reason.

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,



Michael J. Bell, Esq. (Reg. No. 39,604)
Andrew R. Sommer, Esq. (Reg. No. 53,932)

Date: August 11, 2005

HOWREY LLP
2941 Fairview Park Drive, Box 7
Falls Church, Virginia 22042
(202) 383-6500